



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,728	07/10/2003	Tsuyoshi Watanabe	23337	2631
24932	7590	04/02/2004	EXAMINER	
LAW OFFICE OF LAWRENCE E LAUBSCHER, JR			LUEBKE, RENEE S	
1160 SPA RD			ART UNIT	PAPER NUMBER
SUITE 2B				
ANNAPOLIS, MD 21403			2833	

DATE MAILED: 04/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/616,728	WATANABE
	Examiner Renee S. Luebke	Art Unit 2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on \_\_\_\_.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_ is/are allowed.
- 6) Claim(s) 1-8 and 10-13 is/are rejected.
- 7) Claim(s) 9 is/are objected to.
- 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/27/03.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_.

1. The information disclosure statement filed October 27, 2003 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. It is noted that the one page abstract for a "Parallel Computer Having Hierarchical Structure" does not comply with the requirement above and does not appear to be relevant to the present invention.
2. The drawings are objected to because the cross-hatching improperly shows conductive/insulative materials on the sectional views. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. Claims 1-13 are objected to because claim 1 lacks antecedent basis for "the present invention" on line 1. In addition, the claims are generally written with non-standard English and are difficult to understand. Appropriate correction is required.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 6 and 10 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Tateishi, et al.

7. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tateishi in view of Mitsugi, et al. The contact unit of Tateishi comprises a contact, connection objects, a conductive member and a resilient member as claimed, except for the projection provided on the rim of the cavity as required by claim 7. However, Mitsugi teaches the use of a projection 16b on the edge of a contact cavity for the purpose of cleaning the fixed contact to improve reliability. For the same reason, it would have been obvious to include a projection on the cavity of Tateishi.

8. Claims 1-6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frankeny, et al. in view of Tateishi. The contact unit of Frankeny comprises contacts 25 in a through hole and pressed between two connection objects 1, 10. There are a plurality of connecting devices which are connected by wiring paths 16 formed on a multi-layer board 3. The contacts are not pressed. However, Tateishi teaches a similar board with biased contacts and includes a conductive member 131 on an internal circumference of a hole portion. Such a biased contact improves the contact with the connection objects. It would have been obvious to use the biased contacts of Tateishi in order to improve the connection between the devices of Frankeny.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shimizu and Watanabe, at al. are further examples of a biased contact formed in a conductively lined hole.

10. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Any response to this action may be mailed to:

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

13. Any inquiry concerning this communication from the examiner should be directed to Mrs. Renee Luebke whose telephone number is (571) 272-2009.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mrs. Paula Bradley, can be reached at (571) 272-2800, extension 33.



Renee S. Luebke  
Primary Patent Examiner  
March 29, 2004